

## General

### Title

Diagnosis and management of asthma: percentage of patients whose asthma is not controlled or have change in medication or clinical status, who are seen by a health care clinician within two to six weeks.

### Source(s)

Sveum R, Bergstrom J, Brottman G, Hanson M, Heiman M, Johns K, Malkiewicz J, Manney S, Moyer L, Myers C, Myers N, O'Brien M, Rethwill M, Schaefer K, Uden D. Diagnosis and management of asthma. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2012 Jul. 86 p. [81 references]

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Clinical Quality Measure: Access

## Brief Abstract

### Description

This measure is used to assess the percentage of patients age five years and older with an asthma diagnosis whose asthma is not controlled or have a change in medication or clinical status, who are seen by a health care clinician within two to six weeks.

### Rationale

The priority aim addressed by this measure is to increase the rate of patients five years and older who have follow-up visits to ensure asthma control is maintained and appropriate therapy is administered following any visit for asthma or medication adjustment.

Asthma remains the number one chronic disease of childhood with 12.8 million school days missed. The toll of asthma includes 1.7 million emergency department visits, 10.6 million physician office visits,

444,000 hospitalizations and 3,613 deaths.

The United States has seen declining asthma death rates despite increased prevalence. Fewer patients who have asthma report limitation to activities. Twenty-three million Americans, one out of every 13 people, have this chronic inflammatory lung disease that if uncontrolled can lead to suffering with cough, wheezing and shortness of breath. Approximately 50% of asthma patients report having had an attack within one year, and they suffer a larger volume of missed school and work. Of all asthma patients, more than 13% suffer asthma attacks that require urgent medical care. The Centers for Disease Control and Prevention identified its priority to be patients improving management of asthma symptoms.

Asthma is a chronic inflammatory lung disease, and all chronic diseases need regular follow-up visits. Practitioners need to assess whether or not control of asthma has been maintained and if a step-down in therapy is appropriate. Further, practitioners need to monitor and review the daily self-management and action plans, the medications, and the patient's inhaler and peak flow monitoring techniques. The exact frequency of visits is a matter of clinical judgment. If asthma is uncontrolled or a change in medication or clinical status has occurred, the patient should be followed in two to six weeks for an evaluation. A stable asthma patient should be followed at regular intervals of one to six months.

## Evidence for Rationale

Centers for Disease Control and Prevention (CDC). Hepatitis C virus infection among adolescents and young adults: Massachusetts, 2002-2009. MMWR Morb Mortal Wkly Rep. 2011 May 6;60(17):537-41. [PubMed](#)

National Asthma Control Initiative. Take action: stop asthma today! What you can do, NOW. NIH publication 10-7542. Bethesda (MD): National Institutes of Health (NIH); 2010 Sep.

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## Primary Health Components

Asthma; control; medication; clinical status; follow-up visit; children

## Denominator Description

Number of asthma patients who are uncontrolled or have a change in medication or clinical status (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Number of asthma patients who are seen by a clinician within two to six weeks of change in medication or clinical status

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

Transition

### Type of Care Coordination

Coordination across provider teams/sites

Coordination within a provider team/site

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

### Statement of Acceptable Minimum Sample Size

Unspecified

### Target Population Age

Age greater than or equal to 5 years

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Effective Communication and Care Coordination

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding Period

The time frame pertaining to data collection is monthly for those that want to be able to track process changes over a shorter period. Otherwise, data can also be collected quarterly.

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

### Inclusions

Number of asthma patients who are uncontrolled or have a change in medication or clinical status

Asthma includes International Classification of Diseases, Ninth Revision (ICD-9) diagnosis codes: 493.00, 493.01, 493.10, 493.11, 493.90, 493.91.

Population Definition: Patients five years and older.

Data Collection: Identify patients with asthma ICD-9 diagnosis codes at the last visit and asthma was not in control or there was a change in medication or clinical status.

### Exclusions

Unspecified

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Number of asthma patients who are seen by a clinician within two to six weeks of change in medication or clinical status

### Exclusions

Unspecified

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Administrative clinical data

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Identifying Information

### Original Title

Percentage of patients whose asthma is not in control or have a change in medication or clinical status, who are seen by a health care clinician within two to six weeks.

### Measure Collection Name

Diagnosis and Management of Asthma

### Submitter

Institute for Clinical Systems Improvement - Nonprofit Organization

### Developer

Institute for Clinical Systems Improvement - Nonprofit Organization

### Funding Source(s)

The Institute for Clinical Systems Improvement's (ICSI's) work is funded by the annual dues of the member medical groups and five sponsoring health plans in Minnesota and Wisconsin.

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Research Grants: None  
Financial/Non-Financial Conflicts of Interest: Consultant, Point of Care Decision Support on Asthma guidelines software support; Educational presentation for American Lung Association on "Asthma Medications" given in January 2012



## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2012 Jul

## Measure Maintenance

Scientific documents are revised every 12 to 24 months as indicated by changes in clinical practice and literature.

## Date of Next Anticipated Revision

The next scheduled revision will occur within 24 months.

## Measure Status

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Diagnosis and management of asthma. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2010 June. 63 p.

The measure developer reaffirmed the currency of this measure in January 2016.

## Measure Availability

Source available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#)

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## NQMC Status

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## Production

### Source(s)

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